

WHAT IS CLAIMED IS:

1. An animation infrastructure supporting timed modification of element property values, the animation infrastructure comprising:

an animation object class providing a time-varying value definition and including
5 an interface supporting designating:

animation behavior properties;

timing properties;

a set of commands controlling the progression of the animation;

a set of events for providing notifications relating to the status of the
10 animation object.

2. The animation infrastructure of claim 1 further comprising an animation collection object class providing a container for a set of animation objects created from the animation object class, the animation collection object class including an interface
15 supporting designating:

animation collection properties defining:

the set of animation objects within an animation collection object;

a current status of the animation collection object; and

animation collection methods for:

20 configuring the set of animation objects within the animation collection object; and

retrieving a current animation collection value derived from individual values provided by the set of animation objects.

25 3. The animation infrastructure of claim 1 further comprising a key frame object class for specifying a key frame property within an animation object, the key frame object class including:

a set of properties enabling designating:

a key spline;

30 a key time; and

a value.

4. The animation infrastructure of claim 3 further comprising a key frame collection object class for specifying a set of key frame objects for specifying a sequence of frames within a timeline for an animation object.

5

5. The animation infrastructure of claim 1 wherein a float animation object class provides a time changing floating point value.

6. The animation infrastructure of claim 1 wherein a double animation object
10 class provides a time-changing double precision floating point value.

7. The animation infrastructure of claim 1 wherein a rectangle animation object class provides a time-changing top, left position of a defined rectangle.

8. The animation infrastructure of claim 1 wherein a color animation object
15 class provides a time-changing color value.

9. The animation infrastructure of claim 1 wherein a Boolean animation class provides a time-changing Boolean value.

20